

toward suicide prevention. **METHODS:** Suicide prevention (SAVE or “guide”) training was implemented nationwide starting in 2007. All employees that interact with patients must take the 1-hour instructor-led class consisting of videos, worksheets and discussion regarding suicide statistics, suicide risk factors, and the responsibility of all VA employees to recognize suicide risk and to intervene with patients in distress, including taking an urgently distressed patient by the hand and walking him from the outpatient pharmacy to the emergency room, for example. At the end of training, employees completed surveys about attitudes and knowledge of suicide and her role in prevention with Likert scales (range=1 to 5). Descriptive statistics and generalized linear models (GLM) were used to assess differences in pharmacy staff knowledge and attitudes before and after training and to compare pharmacy staff to all employees. **RESULTS:** 7,431 employees from 251 VA Medical Centers trained January 1–September 30, 2008, including 290 pharmacists, pharmacy residents and pharmacy staff. At baseline, compared to all employees, pharmacy staff reported lower levels of suicide knowledge (22% cf. 31%), comfort in talking about suicide (43% cf. 59%), and being prepared to handle suicidal veterans (10% cf. 28%). Pharmacists and pharmacy staff improved significantly on every measure ( $p < 0.0001$ ) by the end of training. We found no differences between pharmacists and other pharmacy staff. After training when given the statement “I completely agree that I am prepared to handle a suicidal veteran,” women and those with additional suicide prevention training were most likely to agree while men and older employees were least likely to do so. **CONCLUSIONS:** Pharmacists and pharmacy staff may have greater baseline needs for training in suicide prevention than other staff.

#### PMH77

##### UTILIZATION PATTERN OF PSYCHOTHERAPY AS AN ADJUNCT TO PHARMACOTHERAPY AMONG AMBULATORY BIPOLAR DISORDER PATIENTS

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**OBJECTIVES:** Psychotherapy has been recommended to be used in conjunction with pharmacotherapy for the treatment of bipolar disorder. This study examined the prescribing patterns of the combination of psychotherapy and pharmacotherapy to treat bipolar disorder in patients receiving outpatient care in the United States. **METHODS:** Data from 2006–2007 National Ambulatory Medical Care Survey (NAMCS) and the outpatient department of National Hospital Ambulatory Medical Care Survey (NHAMCS) were combined to analyze treatment patterns for bipolar disorder. Descriptive statistics was used to examine demographic as well as the clinical characteristics of patients' visits and the utilization pattern of psychotherapy in combination with several psychotropic medications. **RESULTS:** Bipolar disorder was diagnosed in 6.09 million annualized outpatient visits in 2006–2007, representing 0.29% of the overall visits. Most of the visits were made by females (66%), whites (91%) and non-Hispanics (94%). Psychiatric comorbidities such as anxiety disorders, attention-deficit/hyperactivity disorder and substance use disorder were present in approximately 34% of the visits. The most frequently prescribed psychotropic medications were mood stabilizers (64%) followed by antidepressants (54%) and atypical antipsychotics (44%). Psychotherapy along with a psychotropic medication was prescribed in about 1.81 million visits (30%). The most prescribed combinations were psychotherapy along with mood stabilizers in 1.46 million visits (24.12%) and psychotherapy along with atypical antipsychotics in 1.19 million visits (19.6%). **CONCLUSIONS:** Less than one-third of the patients with bipolar disorder were prescribed psychotherapy in combination with pharmacotherapy as recommended for treatment of bipolar disorders. More research is needed to evaluate the reasons for possible sub-optimal use of psychotherapy in bipolar disorders.

#### PMH78

##### PERSISTENCE OF STIMULANT TREATMENT IN CHILDREN AND ADOLESCENTS WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER

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**OBJECTIVES:** To compare and identify the factors associated with persistence of stimulant classes in children and adolescents with Attention-Deficit Hyperactivity Disorder (ADHD). **METHODS:** A retrospective longitudinal cohort analysis was conducted using the Medicaid Analytic eXtract data from 4 states - New York, Illinois, Texas and California. ADHD patients, aged 6–18 years with at least one stimulant prescription claim for a short-acting (SAS), intermediate-acting (IAS) or long-acting stimulant (LAS) and one or more inpatient or outpatient claim involving a ADHD diagnosis (ICD-9-CM code 314.xx) during the study period (January 2003 to December 2005) were selected. New stimulant users were defined as those with no previous stimulant drug prescription in the preceding 6 months. Additional criteria for inclusion included 180 days of pre- and post-index continuous Medicaid eligibility and no multiple index stimulant type claims. Persistence for the index stimulant was measured by summing the number of days the patient remained on the index stimulant therapy from the index prescription date with a maximum refill gap between two consecutive index stimulant claims of 30 days. Stratified linear regression modeling was used to determine the factors associated with persistence for the three stimulant classes. **RESULTS:** Among the 63,362 ADHD patients (10,033 SAS, 5,061 IAS and 48,268 LAS users), LAS group had significantly longer mean and median persistence (176 & 94 days), than the patients in SAS (102 & 60 days) or IAS groups (57 & 95 days). Regression models revealed that race/ethnicity and recent inpatient psychiatric treatment were negatively associated with stimulant persistence in the three stimulant classes. Age (<13 years) and addition of another psychotropic medication, however, improved persistence significantly in all three stimulant classes. **CONCLUSIONS:** Long acting stimulants had comparatively longer

ger persistence than other stimulant classes. An understanding of demographic and clinical characteristics that influence treatment continuation can help to improve persistence rates in ADHD.

#### PMH79

##### PSYCHOTROPIC POLYPHARMACY IN CHILDREN AND ADOLESCENTS WITH ATTENTION – DEFICIT / HYPERACTIVITY DISORDER

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**OBJECTIVES:** To examine the prevalence and time to psychotropic polypharmacy in children with Attention-Deficit Hyperactivity Disorder (ADHD). **METHODS:** This retrospective longitudinal database analysis of medical, pharmacy and eligibility data was performed on Medicaid enrollees from four states – Texas, New York, California, and Illinois – during a 3-year period (January 2003 and December 2005). ADHD patients were identified on the basis of one or more ADHD diagnosis and stimulant (short-acting [SAS], intermediate-acting [IAS] or long-acting [LAS]) prescription(s). New stimulant users were selected if the index stimulant prescription was filed between July 1, 2003 and June 30, 2005 with no previous stimulant drug prescription in the preceding 6 months. Additional eligibility criteria included continuous Medicaid eligibility 180 days pre- and post- index date and no multiple index stimulant type claims. Psychotropic polypharmacy episode was defined as  $\geq 30$  consecutive days of non-stimulant therapy overlapping with the index stimulant therapy. The time to psychotropic polypharmacy was assessed by calculating the time from the index stimulant date to the first day of polypharmacy treatment episode using the Cox proportional Hazards model. **RESULTS:** Among the 63,362 ADHD patients, 19.95% of SAS users, 24.26% of IAS users and 29.56% of LAS users received combination pharmacotherapy involving their index stimulant. Median survival time to psychotropic polypharmacy was found to be 299, 232, and 330 days in the SAS, IAS and LAS treatment groups respectively. Recent inpatient psychiatric visit(s) and younger age emerged as the common risk factors predicting index stimulant and a psychotropic co-prescription. In addition, race/ethnicity and a comorbidity of tics were also identified as predictors for LAS-related psychotropic polypharmacy. **CONCLUSIONS:** Over one in five new stimulant users with ADHD received a concomitant non-index stimulant prescription within a year of commencing stimulant therapy. Demographic and clinical characteristics seem to play a key role in psychotropic polypharmacy in children with ADHD.

#### PMH80

##### UTILIZATION PATTERN AND TREATMENT ADHERENCE WITH MOOD STABILIZERS AND ATYPICAL ANTIPSYCHOTICS AMONG PEDIATRIC PATIENTS WITH BIPOLAR DISORDER: A RETROSPECTIVE CLAIMS-BASED STUDY

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**OBJECTIVES:** Monotherapy with traditional mood stabilizers or atypical antipsychotics is recommended as the first-line treatment for pediatric bipolar disorder. This study examined the prescribing patterns of mood stabilizers and atypical antipsychotics and adherence to these medications in children and adolescents diagnosed with bipolar disorder. **METHODS:** 2003–2005 Medicaid Analytic eXtract data of four states namely California, Illinois, Texas and New York was used. Study participants were 6–18 years old, had a diagnosis of bipolar disorder, and had treatment initiation with atypical antipsychotic or mood stabilizer monotherapy after a 6 month window without filling any of these medications. Descriptive statistics was performed to observe the utilization pattern of monotherapy with mood stabilizers and atypical antipsychotics. Medication possession ratio (MPR) was compared between mood stabilizers and atypical antipsychotics during the 1 year period after the treatment initiation. **RESULTS:** Out of 62,858 patients diagnosed with bipolar disorder during the study period from 2003–05, there were a total of 14,946 patients who met inclusion criteria and whose treatment was initiated with mood stabilizer or atypical antipsychotic monotherapy. Prescription of atypical antipsychotics (73.36%) was predominantly higher than that of mood stabilizers (26.64%). Among the atypical antipsychotics, the most frequently prescribed medication was risperidone (30%) followed by quetiapine (18.2%) and olanzapine (14.4%). Among the mood stabilizers, the most frequently prescribed medication was oxcarbazepine (9.3%) followed by lithium (7.6%) MPR for atypical antipsychotics was  $0.82 \pm 0.18$  and that of mood stabilizers was  $0.81 \pm 0.19$ . Almost 65% of the patients initiated on either of the medications were fully adherent (MPR=1). **CONCLUSIONS:** After receiving the recent US FDA approval for the treatment of bipolar disorder in children and adolescents, atypical antipsychotics are prescribed more frequently than traditional mood stabilizers, especially in context of monotherapy. However, adherence to both the medication classes was similar.

#### Mental Health – Research on Methods

#### PMH81

##### RELATIONSHIP BETWEEN ADHERENCE TO ANTIDEPRESSANT TREATMENTS AND DEPRESSIVE RELAPSE

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**OBJECTIVES:** To compare the impact of various measures of adherence to antidepressant (AD) therapy on the estimation of the rate of depressive relapse using claims database. **METHODS:** Using the Korean Health Insurance Review & Assessment Service (HIRA) claims database (2006–2008), patients aged 18–84 without medical visit due to depression (ICD 10=F06.3, F31.3, F31.4, F32, F33, F34.1, F38.1, F41.2) within 6 months before the first observed prescription of ADs between July 2006 to Jun 2007 (18 months index period), and with at least 3 psychiatric visits within 3